

Listing of Claims:

This listing of claims will replace all prior versions, and listing, of claims in the application.

1-34. (Cancelled)

35. (Original) A game button on a gaming machine, the game button comprising:
a sensor;
a first printed circuit board;
a first plurality of light emitters fixedly coupled to the first printed circuit board; and
a microcontroller mounted to the first printed circuit board and operatively coupled to the sensor and the first plurality of light emitters, the microcontroller including a microprocessor and a memory coupled to the microprocessor.

36. (Original) The game button of claim 35, wherein the sensor is selected from the group consisting of a micro-switch, a Hall-effect sensor, an optic sensor, an eddy current sensor, a resistive sensor, a piezo sensor, and a strain gage sensor.

37. (Original) The game button of claim 35, further comprising a button chassis coupled to the first printed circuit board.

38. (Original) The game button of claim 37, wherein the button chassis is configured with a raised edge, and wherein the button chassis is formed of a transparent material enabling player viewing of a plurality of variable illumination patterns of the first plurality of light emitters through the raised edge.

39. (Original) The game button of claim 38, further comprising a button face assembly, the button face assembly sized to fit within an area bounded by the raised edge of the button chassis.

40. (Original) The game button of claim 39, further comprising:

a plunger-spring assembly positioned between the button face assembly and the button chassis, the plunger-spring assembly sized to fit within the area bounded by the raised edge of the button chassis;

a second printed circuit board coupled to the plunger-spring assembly;

a second plurality of light emitters fixedly coupled to the second printed circuit board;

and

an inter-board connector electrically coupling the second printed circuit board to the first printed circuit board.

41. (Original) The game button of claim 40, wherein the first plurality of lights emitters and the second plurality of light emitters comprise surface mounted light emitting diodes.

42. (Original) The game button of claim 40, further comprising a display device mounted on the second printed circuit board, the display device adapted to display game information to the player.

43. (Original) The game button of claim 42, wherein the display device comprises a two seven-segment light emitting diode display.

44. (Original) The game button of claim 42, wherein the button face assembly comprises:

an illuminator plate coupled to the second printed circuit board, the illuminator plate having a first display aperture disposed therein sized to allow the display device to display game information;

a transparent lens cap; and

a legend plate positioned between the transparent lens cap and the illuminator plate, the legend plate having a second display aperture disposed therein sized to allow the display device to display game information.

45. (Original) The game button of claim 35, wherein the microcontroller is operatively coupled to a controller of the gaming machine.

46. (Original) A method of operating a game button on a gaming machine, the game button including a microcontroller and a plurality of light emitters coupled to the microcontroller, method comprising:

detecting an event; and

in response to the event, causing a variable illumination pattern of the plurality of light emitters to be displayed to a player of the gaming machine.

47. (Original) The game button of claim 46, wherein the event comprises receiving an indication of a player selection of the game button.

48. (Original) The game button of claim 46, wherein the event is selected from the group consisting a base game play event, a bonus game play event, a time of day, a day of a week, a promotional activity, a local activity, an identity of the player, a game selection made by the player and a selection made by a casino operator.

49. (Original) The game button of claim 46, wherein the event comprises receiving a signal from a controller of the gaming machine.

50. (Original) The game button of claim 46, further comprising transmitting a signal to a controller of the gaming machine in response to the event.

51-54 (Cancelled)

55. (New) A game button comprising:

a transparent cover adapted for linear motion in response to being depressed;

a printed circuit board;

a variable display mounted to the printed circuit board, the variable display being capable of presenting a plurality of images viewable through the transparent cover;

a memory associated with the display, the memory adapted to store information for producing one or more of the plurality of images for presentation on the display;

a plunger coupled to the transparent cover; and
a sensor adapted to be actuated by the plunger in response to the linear motion of the transparent cover.

56. (New) The game button of claim 55, wherein the memory is mounted to the printed circuit board.

57. (New) The game button of claim 55, wherein the memory is included in a microcontroller also including a microprocessor, the microcontroller being associated with the variable display.

58. (New) The game button of claim 57, wherein the microcontroller is communicatively coupled to at least one controller selected from a group consisting of a gaming machine controller, a server controller, and a peer gaming machine controller.

59. (New) The game button of claim 58, wherein the microcontroller communicates with the controller via a universal serial bus interface.

60. (New) The game button of claim 57, wherein the microcontroller controls the presentation of the plurality of images on the variable display.

61. (New) The game button of claim 60, wherein the microcontroller controls the presentation of the plurality of images only on the variable display with which the microcontroller is associated.

62. (New) The game button of claim 55, wherein the variable display is a liquid crystal display.

63. (New) The game button of claim 55, wherein the plurality of images form a complex animation pattern.

64. (New) The game button of claim 55, wherein the variable display remains in a fixed position during the linear motion of the transparent cover.

65. (New) The game button of claim 55 further comprising: a button chassis, the printed circuit board being coupled to the button chassis, the button chassis being sized such that the transparent cover, the printed circuit board, and the plunger fit within an area bounded by the button chassis.

66. (New) The game button of claim 55, wherein the button chassis, the printed circuit board, and the variable display remain in a fixed position during the linear motion of the transparent cover.

67. (New) The game button of claim 55, wherein the sensor is selected from the group consisting of a micro-switch, a Hall-effect sensor, an optic sensor, an eddy-current sensor, a resistive sensor, a piezo sensor, and a strain-gage sensor.

68. (New) The game button of claim 55, wherein the transparent cover and the plunger are attached.

69. (New) The game button of claim 55, wherein the transparent cover and the plunger are a single component.

70. (New) The game button of claim 55, wherein a first of the plurality of images is presented on the variable display prior to the actuation of the sensor by the plunger and a second of the plurality of images is presented on the variable display after the actuation of the sensor.

71. (New) A game button comprising:
at least one variable display capable of presenting a plurality of images thereon; and

a memory communicatively coupled with the at least one variable display, the memory adapted to store information for producing the plurality of images presented on the display, the memory being associated solely with the game button and not another game button.

72. (New) The game button of claim 71, wherein the stored information is utilized by the at least one variable display of the game button, and the memory does not allow the stored information to be accessed by another game button.

73. (New) The game button of claim 71, wherein the at least one variable display is a liquid crystal display.

74. (New) The game button of claim 71, wherein the memory is included in a microcontroller also including a microprocessor, the microcontroller being communicatively coupled to the at least one variable display, the microcontroller being associated solely with the game button, the microcontroller controlling the presentation of the plurality of images on the at least one variable display.

75. (New) The game button of claim 74, wherein the microcontroller controls the presentation of the plurality of images on the at least one variable display associated with the game button and does not control the presentation of images on any display not associated with the game button.

76. (New) The game button of claim 74, wherein the microcontroller is communicatively coupled to at least one controller selected from a group consisting of a gaming machine controller, a server controller, and a peer gaming machine controller.

77. (New) The game button of claim 76, wherein the microcontroller communicates with the controller via a universal serial bus interface.

78. (New) The game button of claim 74, wherein the microcontroller is communicatively coupled to a server controller, the microcontroller presenting at least one image on the at least one variable display in response to receiving a transmitted signal from the server controller.
79. (New) The game button of claim 71, wherein the plurality of images form a complex animation pattern.
80. (New) A game button comprising:
a transparent cover adapted for linear motion in response to be depressed;
a first printed circuit board;
a variable display mounted to the first printed circuit board, the variable display capable of presenting a plurality of images, the plurality of images being viewable through the transparent cover;
a second printed circuit board electrically coupled to the first printed circuit board;
a plunger coupled to the transparent cover;
a sensor adapted to be actuated by the plunger in response to the linear motion of the transparent cover; and
a microcontroller communicatively coupled to the sensor and the variable display, the microcontroller controlling the presentation of the plurality of images on the variable display.
81. (New) The game button of claim 80, wherein the microcontroller is mounted on the first printed circuit board.
82. (New) The game button of claim 80, wherein the microcontroller is mounted on the second printed circuit board.
83. (New) The game button of claim 80, wherein the first printed circuit board and the variable display remain in a fixed position during the linear motion of the transparent cover.

84. (New) The game button of claim 80, wherein the first printed circuit board and the variable display move in conjunction with the transparent cover during the linear motion of the transparent cover.
85. (New) The game button of claim 84, wherein the second printed circuit board remains in a fixed position as the first printed circuit board and the variable display move.
86. (New) The game button of claim 84, wherein the second printed circuit board moves in conjunction with the first printed circuit board and the variable display.
87. (New) The game button of claim 80, wherein the variable display is a liquid crystal display.
88. (New) The game button of claim 80, wherein the plurality of images form a complex animation pattern.
89. (New) The game button of claim 80, wherein a first of the plurality of images is presented on the variable display prior to the actuation of the sensor by the plunger and a second of the plurality of images is presented on the variable display after the actuation of the sensor by the plunger.
90. (New) The game button of claim 80, wherein the microcontroller controls the presentation of the plurality of images only on the variable display with which the microcontroller is associated.
91. (New) The game button of claim 80, wherein the microcontroller is communicatively coupled to a controller of a gaming machine.
92. (New) The game button of claim 91, wherein the microcontroller communicates with the controller of the gaming machine via a universal serial bus.